

ABSTRACT OF THE DISCLOSURE

A technique for representing the structure of hierarchically-organized data in a non-hierarchical data structure, such as a relation. The hierarchically-organized data is represented as a tree, and each node in the tree is assigned a position identifier that represents both the depth level of the node within the hierarchy, and its ancestor/descendant relationship to other nodes. The data represented by each node, as well as its position identifier, is stored in a row of a relational database, thereby capturing the hierarchical structure of the data in such relational database. A technique is provided for the compressed storage of position identifiers in a format that allows an efficient bitwise comparison of position identifiers to determine relative order and ancestry.